

1 2/PCT

10/522522

DT01 Rec'd PCT/PTC 27 JAN 2005

DESCRIPTIONDISPOSABLE TOILET-BOX FOR CATS

The invention is referred to the boxes (or trays)

5 into which one fill sand (or hygienic litter) and

which are used as toilet by cats. It is a toilet-box

realized in the disposable version, which after

having been used is destined to the trash together

with its contents.

10 Explanatory note: The disposable toilet-box for

cats has been developed in consequence of the

necessity to take a cat on a journey and having

to stay for a couple of days in a place where

they were not organized for animals. The normal

15 equipment for the physiological relieves of the

cat was too big for the luggage. In the shops they offered several models of cat litter boxes and separately packagings containing hygienic litter and some other equipment like plastic film or bags for collecting the litter but there wasn't found anything handy, quick to use and easy to get rid of it. So a simple and provisory execution has been realized and, supposing that somebody else might have the same necessity, this was examined and a new, practical and disposable object has been defined.

The characteristic of being the toilet-box for cats disposable has been considered fundamental.

The enclosed DRAWING A shows a model for better understanding and example.

It is intended to be realized in two different types:

- 1) Full toilet-box: the packaging (rigid, semirigid or pliable - box, tray or other) containing the sand (or hygienic litter or other material for receiving the animal's excrements) is executed in a way that, after having been opened, it can be used as toilet by the animal and after the use it is destined to the trash together with its contents.

A saving of effort is deriving therefrom for not having to transfer the material before and after the use and an advantage from the hygienical point of view for not needing to handle the dirty material too much after use;

Explanatory note: This corresponds to the disposable toilet-box shown on the enclosed

*DRAWING A. It is made of carton and has a shape that makes it recognizable as being for cats. It is characterized by a particular opening and closing system and a 3-layer bottom to secure it against wetness.*

*The particularity of the opening and closing system makes the box becoming higher when it is open and lower when it is closed. This gives more space for the cat when moving inside and avoids the litter to come out of the box while being it lower when it is closed the box becomes smaller, easier to handle and to throw away. Furthermore the cover, besides having a shape that alludes to a cat's head, is executed for being easy to open,*

60       to close and to fix when closed for keeping the  
material safe inside.

The features and the closing and opening  
mechanism are described herebelow (the dimensions  
can be deducted from the enclosed DRAWING A.2):

65       Features: When it is open, the box is a  
rectangular box with 5 faces: the bottom, 4  
vertical faces, no cover (2 short side faces and  
the frontal and the back face being longer). The  
2 side faces and the frontal have the same  
70       height. The back face is considerably heigher as  
the exceeding part becomes the cover of the box.

The top edge of this part has a particular shape  
(3 curves: 2 sharp curves at the corners and a  
lower plane curve in the middle between them)

75       which is made for fixing the cover when it is  
  
closed and which has been cut in a way that makes  
  
it look like the two ears and the brow of a cat.

The movement is made possible by the following  
  
plies: there is one outcoming horizontal ply at  
  
80       half height all along the 4 side faces which  
  
subdivides them into upper and lower part and 4  
  
oblique entering plies distributed as follows:

one on each side face, in the upper part and  
  
starting from the a.m. horizontal ply where the  
  
85       latter meets with the back face of the box; and  
  
respectively one left and one right on the upper  
  
part of the frontal face, starting from the  
  
horizontal ply where this meets with the side  
  
face.

90       *Closing and opening mechanism: The closing and opening is done by a catenated movement which starts from the cover and is transmitted by the outcoming and entering plies to the the upper part of the box. The outcoming horizontal ply*

95       *becomes the upper border of the box when it is closed.*

*When lowering the cover, this transforms the upper part of the 2 side faces and the frontal face, by acting on the plies, into 3 flaps which*

100       *are oriented towards the internal side of the box. The cover pushes down the two lateral flaps and the two lateral flaps push down the frontal flap.*

When pushing down the cover until bringing the  
105 "brow" under the frontal flap the box is closed.

And it is quite secure against accidental opening  
because the "ears" keep the lateral flaps into  
position and the pressure exerted by the lateral  
flaps on the extremities of the frontal flap  
110 makes the latter resistant against some  
opposition of the cover.

The box can be opened by pulling up the two  
"ears" and bringing the cover in the vertical  
position. The 3 flaps will then return in their  
115 original position and become part of the 4  
vertical faces again. (See drawing A.1 at this  
purpose).

The 3-layer bottom: This is obtained by folding the 4 flaps of the bottom and sticking them together. The two larger cover each the whole surface of the bottom and, there between, the two smaller together cover the same surface. The way of folding them is very simple and shown on drawing A.3.

125 2) Empty toilet-box: this is an empty container (box, pliable box, tray or other) which, after having been filled with sand (or hygienic litter or other material for receiving the animal's escrement), is used by the cat as toilet and which after the use is  
130 destined to the trash together with its contents.

An advantage is deriving therefrom for having the possibility to fill in the desired quantity of sand

(or hygienic litter or other material for receiving the animal's excrements) and an advantage from the  
135 hygienical point of view for not needing to handle the dirty material too much after use.

Explanatory note: The possibility has been considered of making the disposable toilet-box for cats available in an empty version as well  
140 because this might offer some advantages when preferring to choose the quantity of litter to fill in, or wanting to fill in a particular type of litter or considering it easier to stock or to carry.

145 Both types have been devised in the following two versions: as self-standing toilet-box and as spare toilet-box to be received by another structure.

Explanatory note: In some cases it might be preferable to have a permanent and not degradable structure to hold the disposable toilet-box; for example when it is kept outside. The model shown on drawing A is intended to be a full selfstanding type but it could also be used in this sense because the dimensions chosen already fit into some available plastic cat litter boxes. Anyway it can also be produced in different sized and proportions and some other models are at study.

The possibility is reserved to realize the disposable toilet-boxes with various types of devicing, for example: that they can be closed after the use, that they are realized with biodegradable materials, that

they are realized in different models, shapes and sizes, that they are made recognizable for eventual  
165 differentiated trash collections, that they are adapted for being used by other animals aswell, etc.

Explanatory note: A simple devicing of the illustrated disposable toilet-box for cats is already offered by the covering: when it is open  
170 it could be a protection or better separation if it has to be placed against a wall or close to another object, and also it can be used by male cats for putting their marks on it as they do this sometimes on their toilet place. Some other  
175 improvements could of course be apported like providing it with a handle for being carried like a suitcase etc. and the possibility has been

taken into consideration to modifying it for

being used by some other animals aswell. In the

180 latter case the shape of the cover of the model

on drawing A would be changed for alluding to

another animal.

Some other models of disposable toilet-boxes are

at study.

185.

190